

- 3) the barrier reinforcement of claim 1 wherein the means to reinforce the upright member is a structural member suspended within the upright member with positioning means to maintain the reinforcement in the desired location during installation.
- 4) the barrier reinforcement of claim 1 wherein the stopping means is attached to the upright members on both the side to be impacted by the catching means and approximately the opposite side of the upright member.

#### ABSTRACT

An improved system for upgrading new and existing gates or barriers to provide improved crash barrier rating. This system comprises a reinforcing attachment to the gate or barrier and improved reinforced bollards with catch hooks to absorb the energy of impact. The reinforcing attachment is an arrangement of cable and structural members that provide for increased reinforcement by ensuring that the load is distributed on the cable to minimize the risk of breakthrough as a result of cable failure. The bollards have been improved by strengthening the catch hook attachments and adding reinforcement positioning elements to facilitate proper assembly.